WO 2005/071975 PCT/EP2005/000739

- 10 -

Patent Claims

1. A circuit arrangement for degaussing a picture tube comprising

a degaussing coil (ES),

5

10

30

35

- a single PTC element (T), and
- a switch (R), the degaussing coil (ES), the single PTC element (T) and the switch (R) being arranged in series for providing a degaussing by activation of the switch (R) for a defined time interval such that the switch-off takes place at an ampere-turns product of greater than 5.
- 2. The circuit arrangement as claimed in claim 1, wherein the time interval is chosen such that the switch-off takes place at an ampere-turns product within the range of 20 to 30.
- 3. The circuit arrangement as claimed in claim 1 or 2, wherein the time interval has a value of 1 to 20 seconds, in particular of 2 to 5 seconds, for avoiding an overheating of the degaussing coil (ES) in the case of a short circuit in the single PTC element (T).
- 25 4. The circuit arrangement as claimed in claim 1, 2 or 3, wherein the switch is a relay (R) having a mains isolation, the control contacts (5, 6) of the relay being coupled to a microprocessor for control by the microprocessor.
 - 5. The circuit arrangement as claimed in one of the preceding claims, wherein the degaussing coil is made of an aluminum winding having a resistance of 15 to 30 ohms.
 - 6. The circuit arrangement as claimed in one of the preceding claims, wherein the degaussing coil (ES), in the case of a mains voltage of 220 to 240 volts, has a

WO 2005/071975 PCT/EP2005/000739

- 11 -

weight of less than 250 grams in the case of 28 and 29 inch picture tubes, a weight of less than 300 grams in the case of 32 and 34 inch picture tubes, and a weight of less than 500 grams in the case of 37 inch picture tubes.

5

10

15

- 7. The circuit arrangement as claimed in one of the preceding claims, wherein the single PTC element (T) has a resistance of less than 12 ohms, in particular less than/equal to 9 ohms.
- 8. A picture display device with a cathode ray tube, comprising a circuit arrangement as claimed in one of the preceding claims.

9. The picture display device as claimed in claim 8, comprising further a microprocessor being coupled to a control terminal (5, 6) of the relay (R) via a driver stage for operation of the degaussing circuit, for a degaussing is in each case effected when the picture display device is switched on by the microprocessor by means of the degaussing circuit.